



DMSO

AMG-9 TSTCore Update

24 January 1996

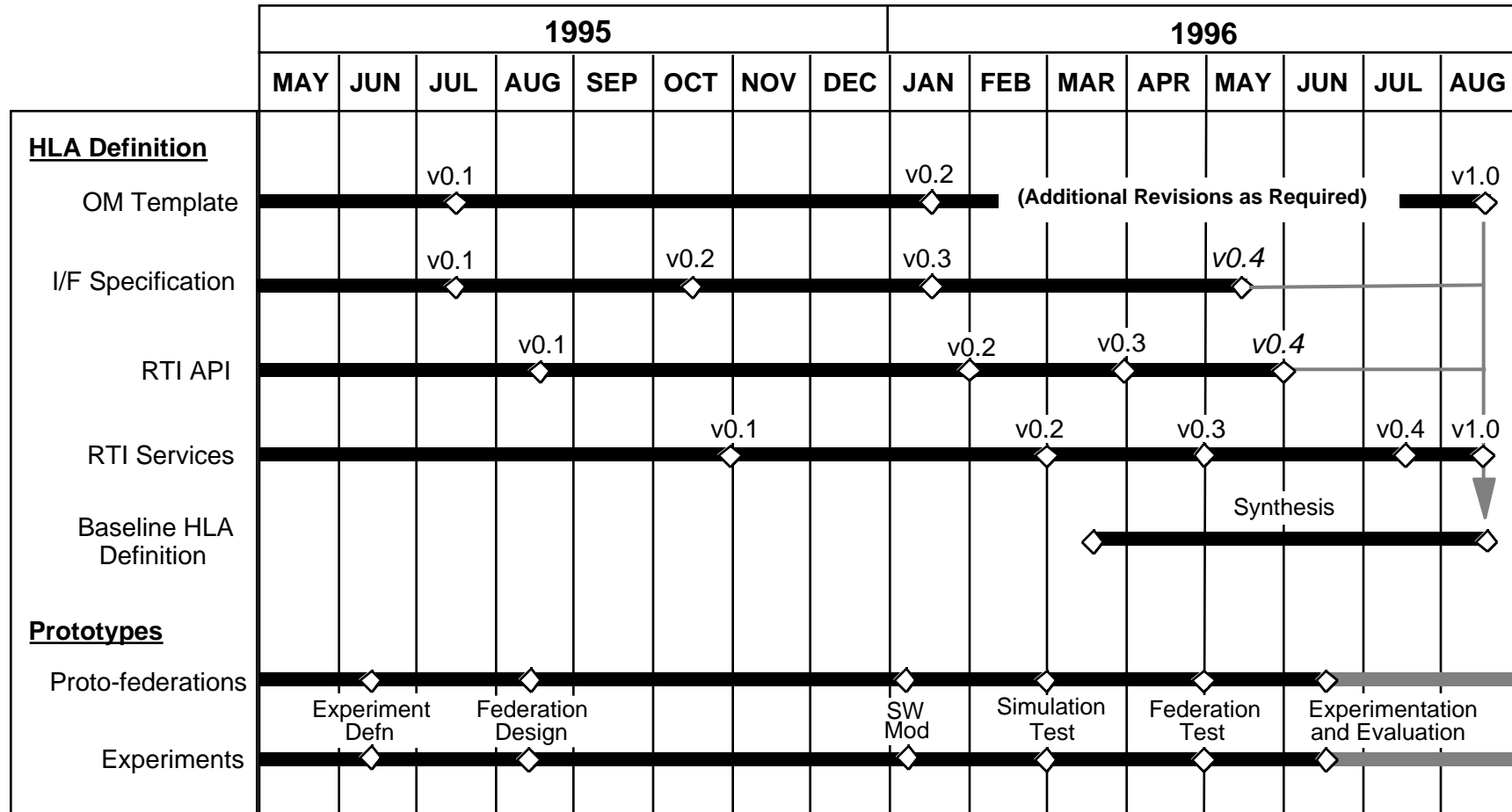


Topics

- **Master Schedule**
- **Federation Development and Execution Process**
- **VV&A and the HLA**
- **Environment and the HLA**
- **DIS Workshop Presentations**
- **Revised Documents**



Master Schedule





Events Calendar

- **Since last AMG meeting:**

- 13-14 December **AMG-8**
- 5 January 96 **Time Mgt/Data Distribution Meeting**
- 16 January 96 **I/F Spec Draft v0.3 distributed**
- 18 January 96 **Protofed Leads meeting**
- 19 January 96 **Obj Model Template Draft v0.2 distributed**

- **Upcoming Events:**

- 24-25 January 96 **AMG-9; release of I/F Spec v0.3 and OMT v0.2**
- 30 Jan-1 Feb 96 **MORS Conference**
- 27-28 February 96 **C2 Representation Workshop**
- 29 February 96 **RTI v0.2 release**
- 6-7 March 96 **AMG-10**
- 11-15 March 96 **14th DIS Workshop**
- 24-25 April 96 **AMG-11**



Federation Development and Execution Process

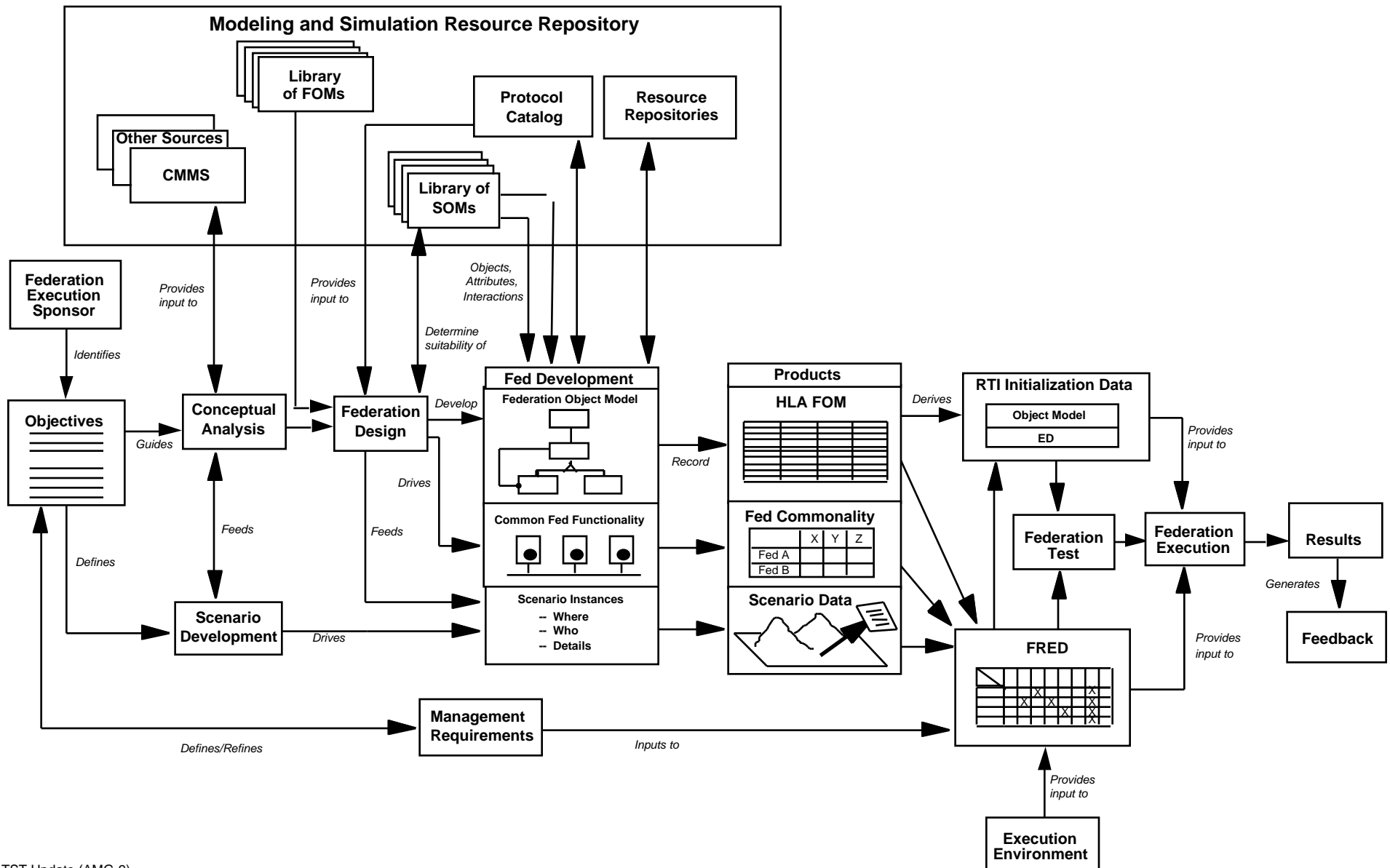
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- **Process Chart has been updated**
 - Relationship descriptions have been added
 - One added relationship (Protocol Catalog --> Federation Design)
- **Process Chart needs attention on areas involving execution**
 - Federation execution team to be convened to address this and other aspects of federation execution (FRED, RTI feedback, etc.)
 - Proto-federation leads concur; Tom Stark (DMSO support team) will coordinate



Federation Execution Development Process

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VV&A and the HLA

- **DoD M&S Master Plan, Objective 5-2:**
 - **“Develop methodologies, standards, and procedures for the VV&A of models and simulations...”**
- **HLA offers a framework to address VV&A**
 - **a generic recommended VV&A process is being defined and integrated with the Federation Execution Development Process**
 - **the VV&A Tech Team will provide an Annex to the HLA Baseline Definition by 30 Jul 96**



WORKING DRAFT





AMG Requested Actions

- **Request that the AMG provide input on the following:**
 - **the draft VV&A Recommended Practices Guide**
 - **the first section of the Guide, VV&A fundamentals, is available for your comment via the DMSO home page at <http://www.dmsso.mil>**
 - **input required by 20 Apr 96**
 - **the choice of programs to serve on the VV&A Assessment Team (VAT) for assessment of the VV&A Recommended Practices Guide**
 - **input required by 2 Feb 96**
 - **Input should be send to Priscilla Glasow (glasow@dmsso.mil)**



Synthetic Environment Interoperability

- **HLA Issue**
 - **Support the types and amount of data passed, at the frequency required**
 - **HLA needs to support a variety of options for representing environments (e.g. environmental data servers)**
 - **HLA needs to ensure support to this range of options in the following:**
 - **HLA I/F Specification**
 - **OMT Specification**
 - **RTI Performance Requirements**



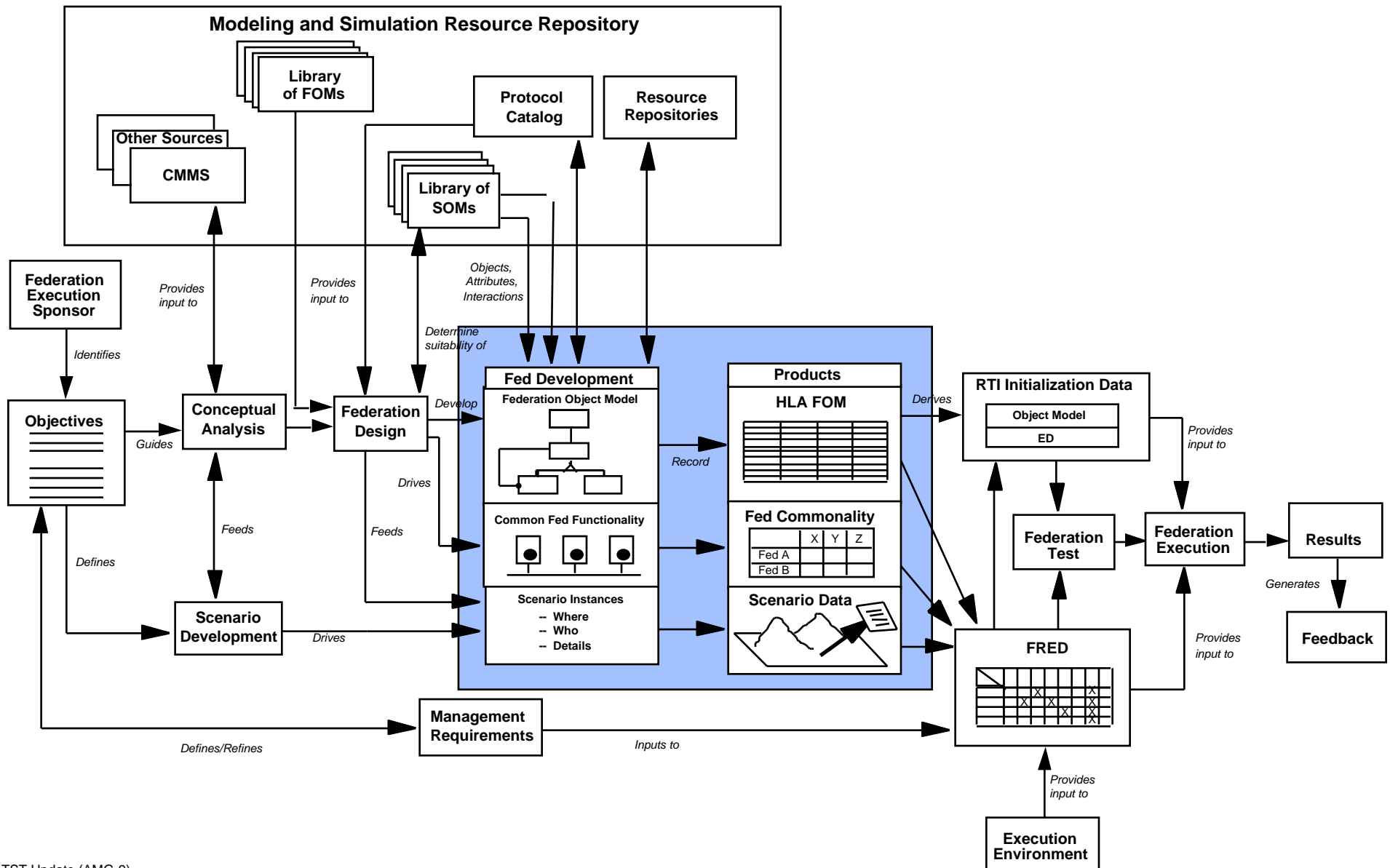
Synthetic Environment Interoperability

- **Addressing the HLA issues**
 - **AMG proto-federations**
 - **JSIMS experimenting with an O-O Environmental Server in a unit level simulation environment**
 - **STOW (~PPF) Synthetic Environment is experimenting with approaches for large scale realism**
 - **Plan to work with Environmental Representation Technical Working Group (ERTWG) to gain broader insights**
 - **The ERTWG is sponsored by the MSWG, lead by the three M&S Environmental Executive Agents to coordinate and address environmental issues.**



Federation Execution Development Process

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Further Issues for Synthetic Environment Interoperability

- **Within federates:**
 - **Commonality in nomenclature and representation for environmental data (e.g. Data Dictionary & Protocol Catalog)**
 - **Databases exist of adequate resolution and accuracy for required geographic areas**
 - **Methods for rationalizing or merging existing databases**
 - **Methods for integrating predictive and actual data reports with existing data**
 - **Commonality in nomenclature and representation for environmental models (e.g. Resource Repository)**
 - **Environmental models are available at the level of fidelity and timing required**
 - **Multi-model implementations provide a coherent depiction of environment**



Broader Issues for Synthetic Environment Interoperability

- **Across federates within a federation**
 - **Commonality in implementations of data and models for synthetic environments**
 - **Multi-federate implementations provide a level playing field**
 - **Environmental Data/ Model Server vs. Local Environmental Data/ Modeling for various applications**
- **Others to be defined by the ERTWG**



Addressing HLA Issues for Synthetic Environments

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Support the types and amount of data passed, at the frequency required to support exercises

- **Proto-federations to provide feedback on implementation experiences with synthetic environments**
- **Working with the ERTWG to assess requirements:**
 - **Planned to brief at the 9-11 Jan 96 ERTWG (blizzard impediment)**
 - **Plan to brief at the rescheduled ERTWG (Feb 96)**
 - **Work with the ERTWG as a forum to link HLA requirements with the broader set of requirements for Synthetic Environment Interoperability**
 - **For those interested, please plan to attend the ERTWG; DMSO will post the date once established**



DIS Workshop Presentations

- **A total of 16 abstracts were submitted on behalf of DMSO to the 14th DIS Workshop**
 - **DMSO/DMSO Support**
 - **MIT/Lincoln Lab**
 - **MITRE**
 - **GTRI**
 - **TIS**
- **All were accepted by the DIS Steering Committee.**



HLA Abstracts Submitted to DIS Workshop

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Abstract Number	Title	Author(s)
96-14-046	HLA Federation Development Process	J. Dahmann D. Ponikvar R. Lutz
96-14-047	HLA Testing: Separating Compliance from Interoperability	M. Loper
96-14-048	HLA Object Model Template Status	R. Lutz
96-14-054	The Modular Reconfigurable C4I Interface - A Link From Live C4I to Simulation	J. Dahmann M. Cosby Col (sel) Jefferson
96-14-060	Attribute Clustering	R. Cebula et al (MIT/
96-14-067	System Security Approach for the High Level Architecture (HLA)	J. Filsinger H.O. Lubbes
96-14-068	Development of the HLA Runtime Infrastructure Specification	T. Stark R. Weatherly A. Wilson
96-14-092	HLA Time Management and DIS	R. Fujimoto R. Weatherly



HLA Abstracts Submitted to DIS Workshop (con't)

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96-14-103	An Introduction to the HLA RTI	J. Calvin R. Weatherly
96-14-104	Design Issues for the HLA RTI Prototype Version 0.2	S. McGarry R. Weatherly et al
96-14-106	Eval. of Grid-based Relevance Filtering for Multicast Group Assignment	S. Rak D. Van Hook
96-14-115	HLA and Next Generation DIS	D. Miller
96-14-122	The HLA Interface Specification and Application Programmer's Interface (API)	R. Weatherly A. Wilson T. Stark
96-14-124	HLA Data Dictionary and Protocol Catalog	S. Seidensticker
96-14-125	HLA Data Filtering/Distribution Requirements	S. Seidensticker
96-14-153	A New Strategy for VV&A	P. Glasow



HLA Document Revisions

- **HLA Management Plan**
 - Incremental changes are brought incorporated into a revised version
- **Annotated Briefing also in revision**
 - Basis for 'Interim Definition of HLA'
 - Reference updated specifications (I/F and OMT) and rules
 - Common definitions of terms